WHAT IS CLAIMED IS:

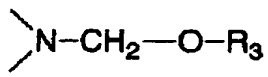
1. A negative resist composition comprising:

(A) an alkali-soluble resin;

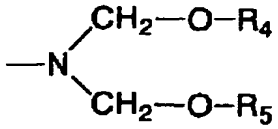
(B-1) a cross-linking agent capable of cross-linking with the alkali-soluble resin (A) by the action of an acid, in which the cross-linking agent is a phenol compound containing: in the molecule one or more benzene rings; and at least two cross-linking groups bonded to any of the benzene rings, the cross-linking group being a group selected from the group consisting of a hydroxymethyl group, an alkoxymethyl group and an acyloxymethyl group;

(B-2) a cross-linking agent capable of cross-linking with the alkali-soluble resin (A) by the action of an acid, in which the cross-linking agent contains at least two groups selected from the groups represented by the following formula (1) and represented by the following formula (2); and

(C) a compound capable of generating an acid upon irradiation with an actinic ray or radiation:



(1)

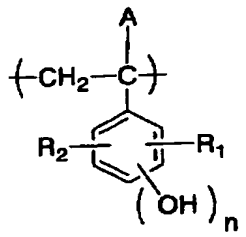


(2)

wherein R_3 represents a hydrogen atom, an alkyl group, or an

alkylcarbonyl group; R_4 and R_5 each represent a hydrogen atom, an alkyl group or an alkylcarbonyl group.

2. The negative resist composition as described in claim 1, wherein the alkali-soluble resin (A) contains a repeating unit represented by the following formula (3):

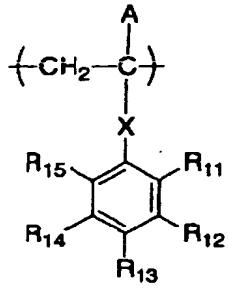


(3)

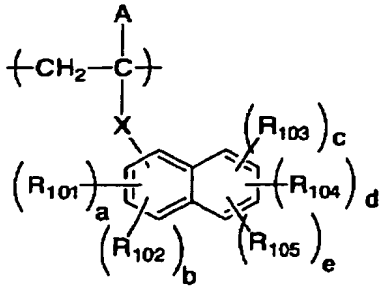
wherein A represents a hydrogen atom, an alkyl group, a halogen atom, or a cyano group; R_1 and R_2 each represent a hydrogen atom, a halogen atom, an alkyl group, an alkenyl group, a cycloalkyl group, an aryl group, an aralkyl group, an alkoxy group or an alkylcarbonyloxy group; n represents an integer of 1 to 3.

3. The negative resist composition as described in claim 1, which further comprises (D) a nitrogen-containing basic compound.

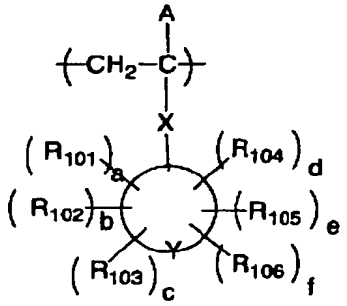
4. The negative resist composition as described in claim 1, wherein the alkali-soluble resin (A) contains at least one repeating unit selected from repeating units represented by the following formulae (4), (5) and (6):



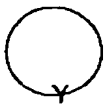
(4)

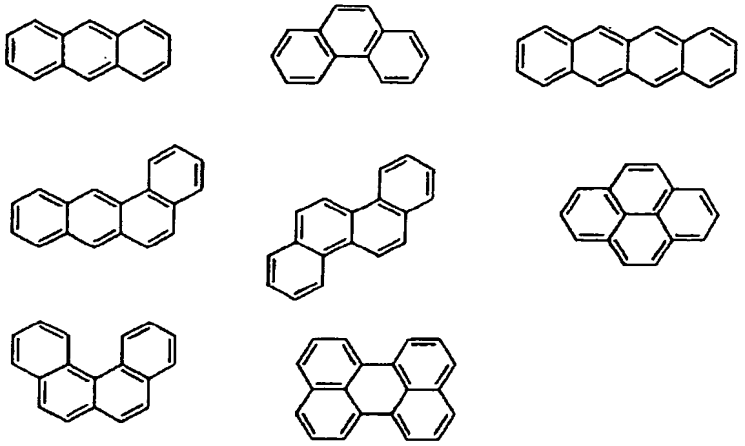


(5)



(6)

wherein  represents a group selected from any of the following structures;



A has the same meaning as in formula (3); X is a single bond, -COO-, -O-, or -CON(R_{16})-; R_{16} represents a hydrogen atom, or an alkyl group; R_{11} to R_{15} each represent the same meaning as R_1 in formula (3); R_{101} to R_{106} each represent a hydroxyl group, a halogen atom, an alkyl group, an alkoxy group, an alkylcarbonyloxy group, an alkylsulfonyloxy group, an alkenyl group, an aryl group, an aralkyl group, or a carboxyl group; a to f each represent an integer of from 0 to 3.

5. The negative resist composition as described in claim 1, which further contains a surfactant.

6. The negative resist composition as described in claim 2, wherein the alkali-soluble resin (A) contains the repeating unit represented by the formula (3) in an amount of 50 to 100 mole %.

7. The negative resist composition as described in claim 4, wherein the alkali-soluble resin (A) contains at least one

repeating unit selected from repeating units represented by the formulae (4), (5) and (6) in an amount of 3 to 50 mole %.

8. The negative resist composition as described in claim 1, wherein the cross-linking agent (B-1) is a phenol derivative having: a molecular weight of 2,000 or below; 3 to 5 benzene rings per molecule; and at least two cross-linking groups per molecule, in which the cross-linking group is a group selected from a hydroxymethyl group, an alkoxymethyl group or an acyloxymethyl group, and the cross-linking group is bonded to any of the benzene rings.

9. The negative resist composition as described in claim 1, wherein the cross-linking agent (B-1) is a phenol derivative having: 1 to 2 benzene rings per molecule; and at least two cross-linking groups per molecule, in which the cross-linking group is a group selected from a hydroxymethyl group, an alkoxymethyl group or an acyloxymethyl group, and the cross-linking group is bonded to any of the benzene rings.

10. The negative resist composition as described in claim 1, wherein the cross-linking agent (B-2) includes one of a compound or resin containing a melamine skeleton, a compound or resin containing an urea skeleton, a compound or resin containing an imidazolidine skeleton, and a compound or resin

containing a glycoluril skeleton.

11. The negative resist composition as described in claim 1, which comprises the cross-linking agent (B-1) in a proportion of 0.5 to 50 % by weight, to the total solid content in the negative resist composition.

12. The negative resist composition as described in claim 1, which comprises the cross-linking agent (B-2) in a proportion of 0.5 to 50 % by weight, to the total solid content in the negative resist composition.

13. The negative resist composition as described in claim 1, wherein the ratio between the cross-linking agents (B-1) and (B-2) is from 3/97 to 97/3 by mole.

14. A method of forming a resist pattern, which comprises: forming a resist film including the negative resist composition described in claim 1; irradiating the resist film with an actinic ray or radiation; and developing the irradiated resist film.